

Eradication of Little Fire Ants from Kauai
Organization: Hawai'i Ant Lab

Award: \$14,469



#### Introduction:

The Hawai'i Ant Lab delivers the invasive ant strategy for the state of Hawai'i. Our mission is to:

- Protect Hawai`i from new intentional and unintentional introductions of invasive ants,
- Prevent the inter-island and intra-island spread of existing invasive ant species,
- Provide sound, practical treatment methods for homeowners, natural resource managers and industry,
- Eradicate new incursions whenever possible.

HISC supplies approximately 30% of total HAL operating funds. An additional 30% is provided by Hawai'i Department of Agriculture and the remainder is sourced from competitive grants from other sources.

A small infestation of Little Fire Ants has been present on the island of Kauai for over ten years. Intensive efforts by the Kauai Invasive Species Committee and Hawai`i Department of Agriculture have restricted the distribution of this species to an area of approximately 12 acres near Kalihiwai, however, it has not been possible to eradicate this infestation until now. This project aims to eradicate Little Fire Ants from Kauai and prevent further spread throughout the island.

HISC provided partial funding for this project with the US Forest Service and Hawai'i Department of Agriculture also contributing. Staff from HDOA and the Kaua'i Invasive Species Committee assisted Hawai'i Ant Lab staff with survey and treatment activities.



Staff from the Kauai Invasive Species Committee applying the new gel bait high in the canopy

## Achievements in FY13

This project has been immensely successful to date. Kauai Invasive Species Committee, Hawai'i Ant Lab, Hawai'i Department of Agriculture and County of Kauai have been working together to implement this plan. Of the LFA from the main infested area, only a single ant was detected during the last survey and it appears we are on-track to eradicate. Next Fiscal Year, we plan to continue monitoring and develop and execute a plan for the remaining infested area.

#### Deliverable 1: Delimit the infested area

Prior to beginning the eradication treatments, the entire site was intensively surveyed to identify infestation boundaries and determine the ant population density (see map below). Over 600 baiting stations were deployed in the field.

# **Deliverable 2: Application of treatments**

A total of eight treatments were applied, one every six weeks, beginning September 2012 and completed by July 2013. This intensive treatment level was needed to ensure all ant colonies were eliminated. The newly developed HAL bait gel was applied to all vegetation over 6ft in height (including mature palm trees) and granular baits were applied to the ground in open spaces. Only three individual ants have been detected in the main infested area during the surveys conducted since February 2013.



Map showing the survey area, and include a caption in this box – (source Kauai Invasive Species Committee).

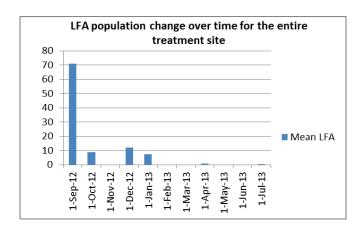


Figure showing changes in ant population through the treatment phase.

## **Deliverable 3: Post-eradication monitoring**

Monitoring and eliminating remnant colonies will need to continue for another three years. The first monitoring survey was conducted in July 2013; only a single ant was detected with this survey.

## For more information, please contact:

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